Draft Short-Listing Criteria (Version 4)

Note to reviewers: Draft short-listing criteria were reviewed at the April 20, 2007 Steering Committee meeting. This version includes revisions to the criteria recommended at the Steering Committee meeting. This version also addresses the revised approach to the evaluation of conservation elements grouped into bundles rather than as whole conservation strategy alternatives.

Application of the following draft short-listing criteria is intended to provide an assessment of the relative effectiveness of draft BDCP bundles of conservation elements (bundles). The intended outcome of applying the criteria to each of the bundles is to provide the Conservation Strategy Workgroup with the information necessary to identify bundles and elements from bundles that will be combined and further developed into a short list of conservation strategy alternatives (CSA). It is intended that the short-list of CSA's will represent a clearly defined range of differing approaches to achieving the BDCP planning goals and objectives. The short-list of CSAs will then be evaluated using a different and more rigorous set of criteria to craft the proposed BDCP Conservation Strategy Framework.

The draft short-listing criteria presented below were developed based on the BDCP Planning Agreement (i.e., the Planning Agreement Planning Goals [section 3] and Preliminary Conservation Objectives [section 6]; draft BDCP Conservation Objectives previously reviewed by the Conservation Strategy Workgroup; previously developed criteria for evaluating approaches to conserving the Delta (Mount et. al.2006)[1]; and criteria suggested by BDCP participants. It is anticipated that each of the bundles will be qualitatively assessed against the criteria in narrative form. The criteria will be applied using the professional judgment of experts based on the present understanding of how the Bay-Delta ecosystem operates. The level of certainty regarding conclusions will be included in the qualitative narrative for each criterion. The bundles and their constituent elements are not expected to conflict with the policies and goals of the Fishery Agencies, however, any potential for such conflicts will be described as identified through application of the criteria.

Biological Criteria

1. Relative degree to which the bundle would reduce species mortality attributable to non-natural mortality sources, in order to enhance production (reproduction, growth, survival), abundance, and distribution for each of the covered fish species (BDCP Conservation Objective).

2. Relative degree to which the bundle would provide water quality and flow conditions necessary to enhance production (reproduction, growth, survival) , abundance, and distribution for each of the covered fish species (BDCP Conservation Objective).

3. Relative degree to which the bundle would increase habitat quality, quantity, accessibility, and diversity in order to enhance and sustain production (reproduction, growth, survival), abundance, and distribution; and to improve the resiliency of each of the covered species' populations to environmental change and variable hydrology (BDCP Conservation Objective).

[1] Mount, Jeffrey, Robert Twiss, and Richard M. Adams. 2006. *The Role of Science in the Delta Visioning Process: A report of the Delta Science Panel of the CALFED Science Program.* Available online at http://science.calwater.ca.gov/pdf/CSP_delta_vision_process_Twiss_062306.pdf

4. Relative degree to which the bundle would increase food quality, quantity, and accessibility (e.g., phytoplankton, zooplankton, macro-invertebrates, forage fish) to enhance production (reproduction, growth, survival) and abundance for each of the covered fish species (BDCP Conservation Objective).

5. Relative degree to which the bundle would reduce the abundance of non-native competitors and predators to increase native species production (reproduction, growth, survival), abundance and distribution for each of the covered fish species (BDCP Conservation Objective).

6. Relative degree to which the bundle improves ecosystem processes in the BDCP planning area to support aquatic and associated habitats (BDCP Conservation Objective).

7. Relative degree to which the bundle can be implemented within a timeframe to meet the near-term needs of each covered fish species (post BDCP authorization).

Planning Criteria

8. Relative degree to which the bundle allows covered activities to be implemented in a way that meets the goals and purposes of those activities.

9. The relative feasibility and practicability of the bundle, including the ability to fund, engineer, and implement.

10. Relative costs (including infrastructure, operations, and management) associated with implementing the bundle.

Flexibility/Durability/Sustainability Criteria

11. Relative degree to which the bundle will be able to withstand the effects of climate change (e.g., sea level rise, changes in runoff), variable hydrology, seismic events, subsidence of Delta islands, and other large-scale changes to the Delta.

12. Relative degree to which the bundle could improve ecosystem processes that support the long term needs of each of the covered species and their habitats with minimal future input of resources.

13. Relative degree to which the bundle can be adapted to address needs of covered fish species over time.

14. Relative degree of reversibility of the bundle once implemented.

Third Party Impacts Criteria

15. Relative degree to which the bundle avoids impacts on the distribution and abundance of other native species in the BDCP Planning Area.

16. Relative degree to which the bundle avoids impacts on the human environment.

17. Relative degree of risk of the bundle causing impacts on sensitive species and habitats in areas outside of the BDCP Planning Area.